



The Steel Company of Canada

Lake Erie Works Community Liaison Committee (CLC) Meeting

October 20, 2021 (5:30-7:30pm)

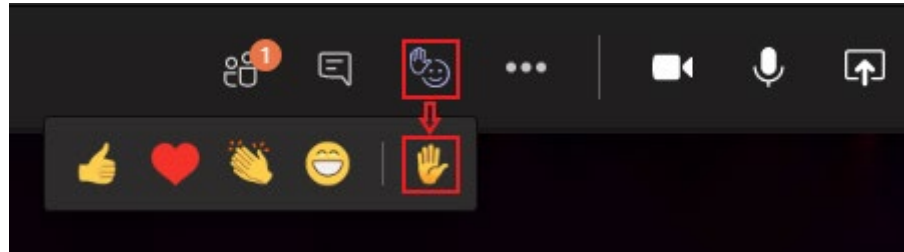


Conducting Our Meeting

Questions and Comments



- Through the course of the meeting, we will be taking questions from members of Stelco's Community Liaison Committee (CLC). Members of the public are asked to hold their questions until the Community Feedback portion of the agenda.
- Please indicate your desire to ask a question by using the 'raise hand' tool at the top of your MS Teams screen.



- Once you are recognized your microphone (and camera should you so choose) will be activated. Please click on the 'raise hand' feature a second time to lower your hand.
- We will cycle through the questions and comments in the order they are received.
- If you have multiple questions, we ask that you ask your first question and then return to the queue so that everyone has equal opportunity to make their comments.
- Alternatively, you can utilize the chat feature to type a question or comment.

Agenda

Discussion Topics for Today's Meeting



1. Welcome
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 April 2021 Meeting
4. Cokemaking Update
 - Recap: Coke Battery Performance
5. Fugitive Dust Management
6. Secondary Materials Permanent Storage Facility
7. Site-wide Environmental Compliance Approval Applications
8. Community Feedback
9. Adjournment



Agenda

Discussion Topics for Today's Meeting



1. Welcome
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 April 2021 Meeting
4. **Cokemaking Update**
 - **Recap: Coke Battery Performance**
5. Fugitive Dust management
6. Secondary Materials Permanent Storage Facility
7. Site-wide Environmental Compliance Approval Applications
8. Community Feedback
9. Adjournment



Coke Battery Rehabilitation Project

Strategic Investment to Improve Performance



- In July 2019, we commenced the rehabilitation of the LEW coke battery by idling one half of the battery and preparing the ovens for repair and related demolition work.
- During the first quarter of 2021, the Company ceased its coke production at LEW to proceed with an expanded project to rehabilitate the coke battery, which includes upgrading the LEW coke oven end flues.
- Based on currently available information, the Coke Battery Rehabilitation Project is expected to cost approximately \$130 million and is anticipated to be completed in the fourth quarter of 2021.
- We expect that the LEW Coke Battery Rehabilitation Project will improve the integrity and efficiency of the LEW coke oven battery, with the potential of further increasing our production capability by up to 50 thousand nt of additional coke per annum.
- We also expect this Project will help us to meet our environmental compliance objectives and generating incremental by-product gases that we recycle into our other operations, thereby reducing energy purchases.



Coke Battery Performance – Method 303

Performance Review – Daily (Jan. to Mar. 2021)*



Results are for the most current operating period. The coke battery has not produced since the end of Q1 2021 as work accelerated on the rehabilitation project.

Date	Doors (% Leaks)	Lids (% Leaks)	Off-takes (% Leaks)
2015 Thresholds (July 2 start)	54%	2%	NA
2016 Thresholds	32%	2%	NA
2017-2019 Thresholds	10%	2%	5%
2020 - 2021 Thresholds	5%	1%	4%
Jan 1– Mar 22, 2021 Range (Average)	0.0 – 5.56% (1.64%)	0.0 – 2.63% (0.06%)	0.00 – 8.33% (1.73%)

Daily Measurements Performed

- All weekdays, except for holidays
- 2 Saturdays
- 3 Sundays

Jan 1 to Mar 22 Operational Adjustments

- 8 operational adjustments for offtakes
- 2 operational adjustments for doors
- 2 operational adjustments for lids

* Results during the Coke Battery Rehabilitation Project are not typical of battery performance due to significant work underway and resulting impacts of production. Performance improvements are anticipated following the completion of the project.

Coke Battery Performance – Method 303

Performance Review – 30-Day Rolling Avg. (Jan. to Mar. 2021)*



Results are for the most current operating period. The coke battery has not produced since the end of Q1 2021 as work accelerated on the rehabilitation project.

Date	Doors (% Leaks)	Lids (% Leaks)	Off-takes (% Leaks)	Charging (sec) (log avg)
2015 Limits (July 2 start)	38%	0.8%	25%	12 sec
2016 Limits	22.5%	0.8%	15%	12 s
2017-2019 Limits	7%	0.8%	4.2%	12 s
2020 - 2021 Limits	4%	0.4%	2.5%	12 s
Jan 1 – Mar 22, 2021 Range (Average)	1.46 – 1.96% (1.69%)	0.00 – 0.09% (0.02)	1.27 – 2.37% (1.80%)	5.47 – 6.57s (6.01s)

Jan 1 to Mar 22 Performance

- In compliance with current performance limits

* Results during the Coke Battery Rehabilitation Project are not typical of battery performance due to significant work underway and resulting impacts of production. Performance improvements are anticipated following the completion of the project.

Coke Battery Performance – Method 303

Performance Review – Daily Observations. (Jan. to Mar. 2021)*



Results are for the most current operating period. The coke battery has not produced since the end of Q1 2021 as work accelerated on the rehabilitation project.

Date	Pushing Emission (opacity %)
2015 Threshold (July 2 start)	≥ 50%
2016 – 2018	≥ 50%
2019	≥ 40%
2020 - 2021	≥ 30%
Jan 1 – Mar 22, 2021 Range (Average)	0 – 47% (6.43%)

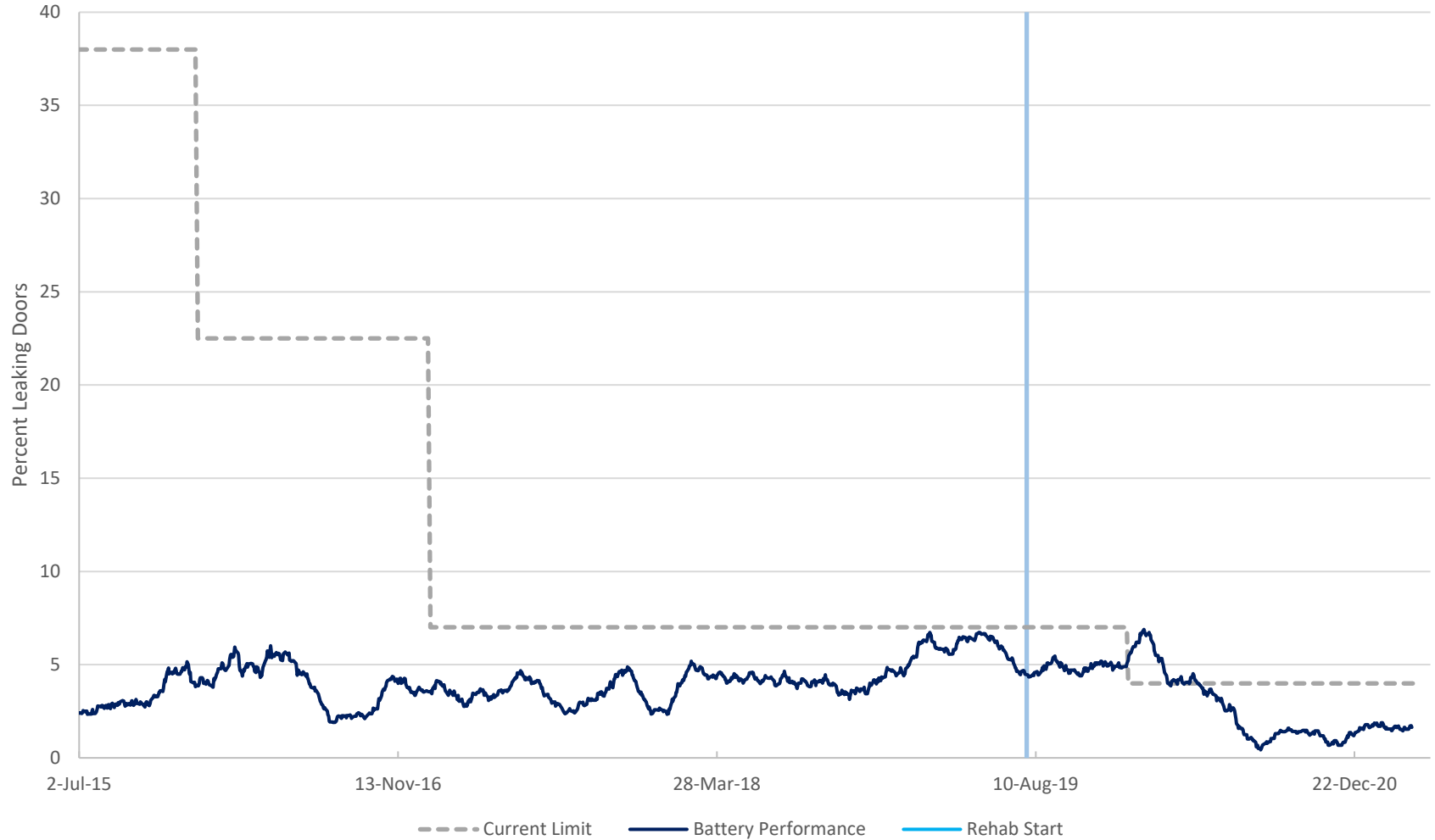
Jan 1 to Mar 22 Operational Adjustments

- 2 operational adjustments for pushing

* Results during the Coke Battery Rehabilitation Project are not typical of battery performance due to significant work underway and resulting impacts of production. Performance improvements are anticipated following the completion of the project.

Battery Performance – 30 Day Rolling Average

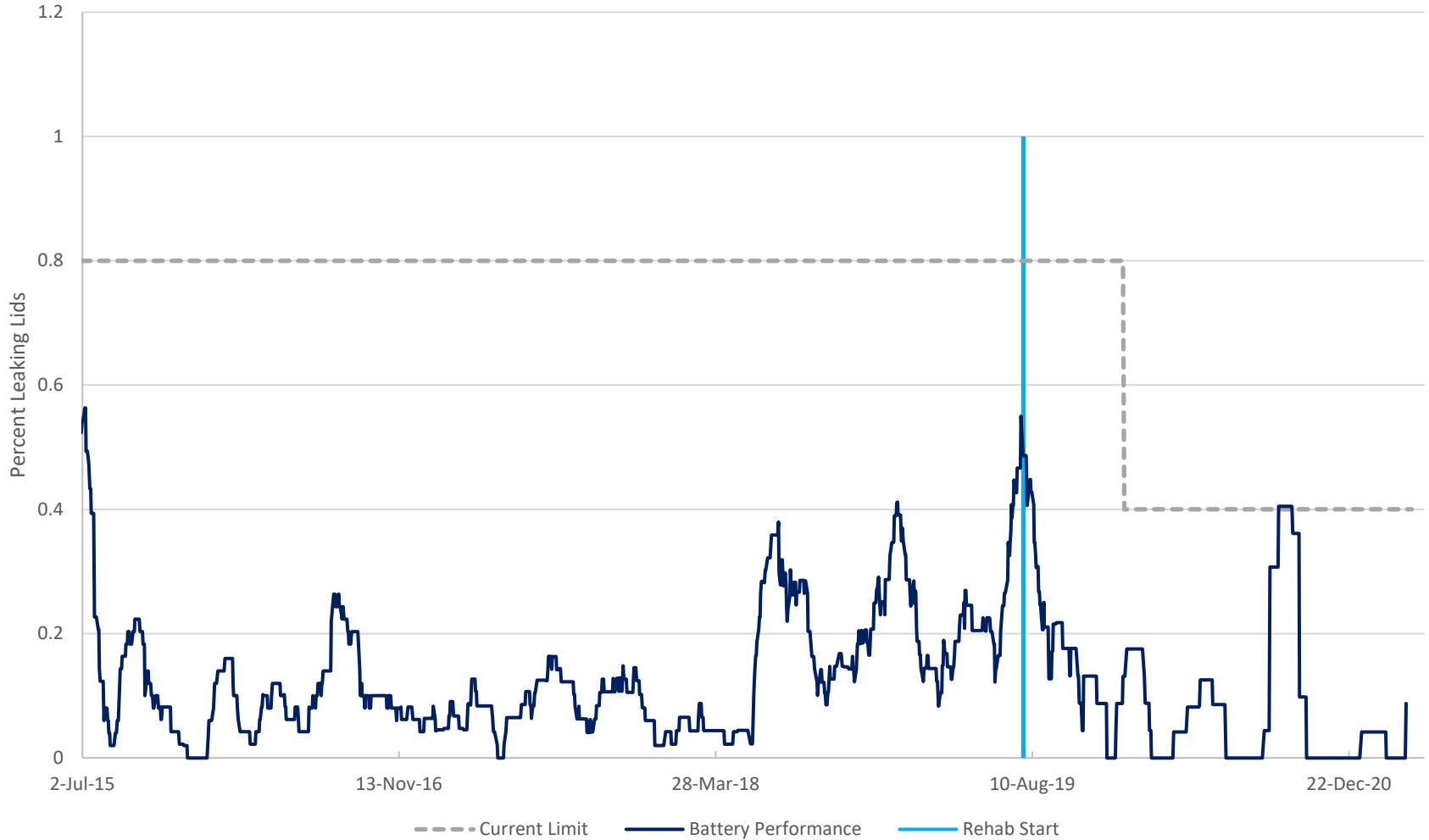
Door Emissions*



* Results during the Coke Battery Rehabilitation Project are not typical of battery performance due to significant work underway and resulting impacts of production. Performance improvements are anticipated following the completion of the project.

Battery Performance – 30 Day Rolling Average

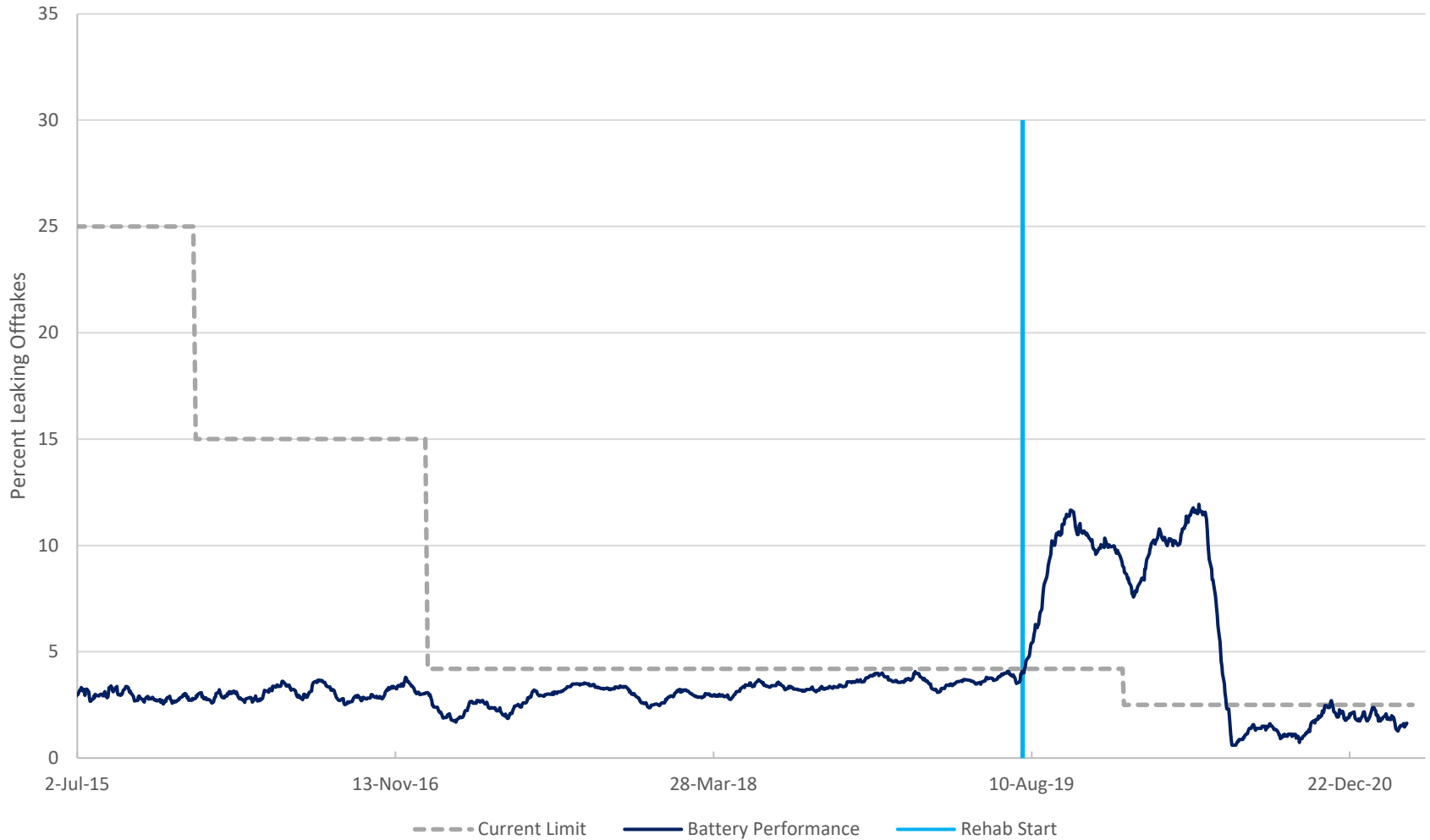
Lid Emissions*



* Results during the Coke Battery Rehabilitation Project are not typical of battery performance due to significant work underway and resulting impacts of production. Performance improvements are anticipated following the completion of the project.

Battery Performance – 30 Day Rolling Average

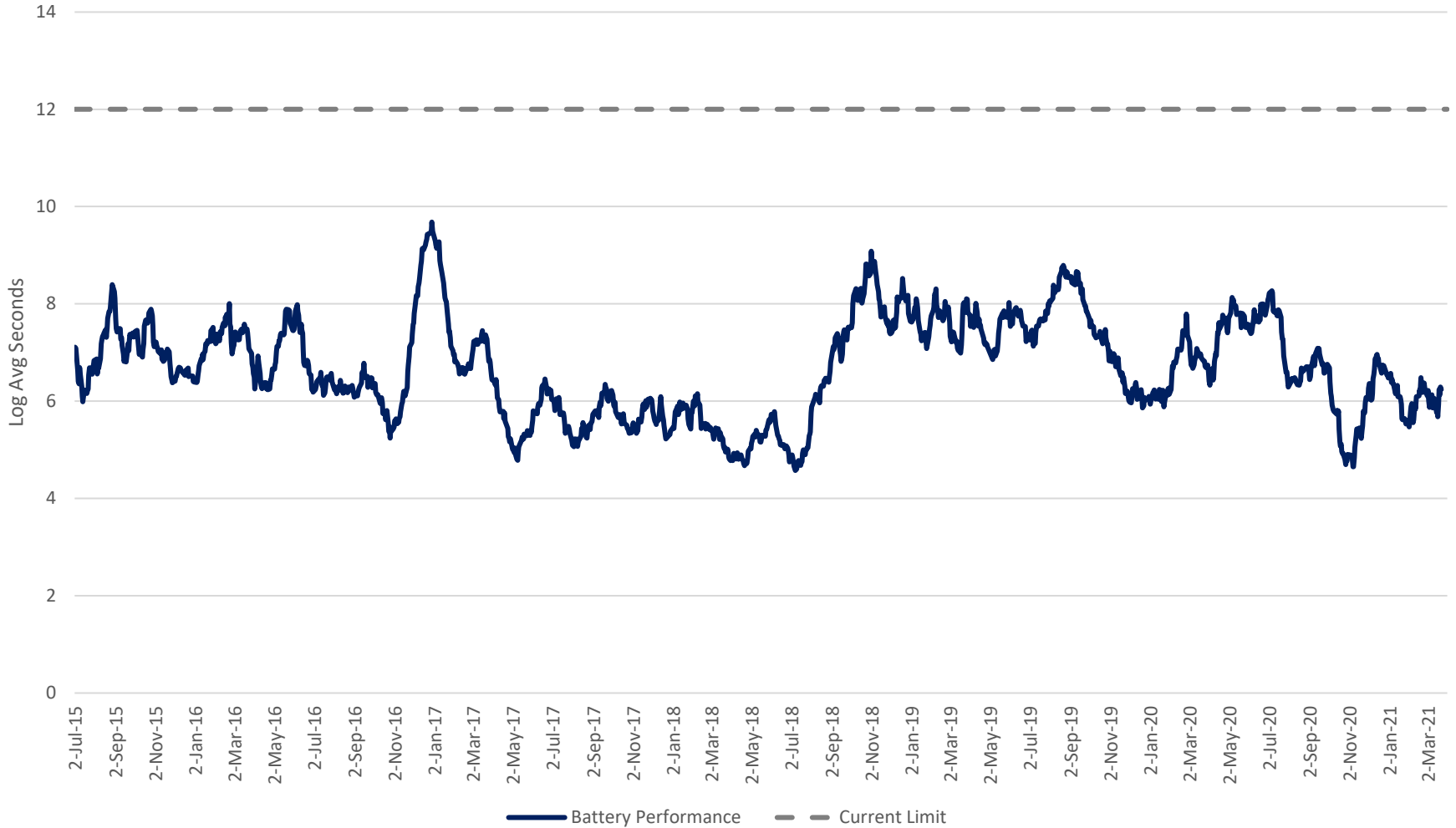
Offtake Emissions*



* Results during the Coke Battery Rehabilitation Project are not typical of battery performance due to significant work underway and resulting impacts of production. Performance improvements are anticipated following the completion of the project.

Battery Performance – 30 Day Rolling Average

Charging Emissions*



* Results during the Coke Battery Rehabilitation Project are not typical of battery performance due to significant work underway and resulting impacts of production. Performance improvements are anticipated following the completion of the project.

Agenda

Discussion Topics for Today's Meeting



1. Welcome
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 April 2021 Meeting
4. Cokemaking Update
 - Recap: Coke Battery Performance
5. **Fugitive Dust Management**
6. Secondary Materials Permanent Storage Facility
7. Site-wide Environmental Compliance Approval Applications
8. Community Feedback
9. Adjournment



Fugitive Dust Management

Overview



- Well-established fugitive dust management plan already in place
 - A “living” document – best management practices for continual improvement
 - Integrated in Standard Operating Procedures
- Dust mitigation practices are customized by season to address different external environmental conditions
- Stockpiles and roads are inspected on a continuous basis to determine need for dust control
- Several tools are utilized to take a proactive approach and identify impactful weather conditions (i.e. high winds) that could require mitigating action

Fugitive Dust Management

Raw Material Handling - Dock



- The Process Coordinator – Raw Materials & Dock oversees dust management of stockpiles at all times of the year
- Coal Stockpiles generally arranged to minimize surface area that can be affected by prevailing winds
 - 9 stock-piles reduced to 4 stock-piles
- Sufficient quantity of raw materials are shipped to the facility via boat prior to seasonal closure of the Great Lakes Seaway.
 - Cover coal piles with a crusting agent → sealant
 - Dozers and graders used to maintain appropriate pile dimensions
- In forecasted high wind conditions, operating stockpiles are suppressed with water by tanker immediately (temperature considerations)
- May include temporary cessation of operations if deemed necessary

Fugitive Dust Management

Tools For High Wind Warning Notification



- Automated email alerts when measured wind at a weather station exceeds an alert setpoints
 - Emails are sent to iron producing management and all blast furnace Shift Managers (24 x 7)
 - System is integrated with the blast furnace control room alarm server, issuing an alarm for “High Wind Warning”, monitored at all times.
- Information is immediately passed on to all Raw Material/Dock personnel via radio so they can take immediate action



LEW Blast Furnace & Dock Department

General Info.	Logs	Safety	Mobile Equipment	Employee	Technical	Links	Training	Administration
---------------	------	--------	------------------	----------	-----------	-------	----------	----------------

Welcome to the LEW Blast Furnace & Dock Department Website

Current weather conditions and forecast information is prominently displayed and available on our internal systems



Ambient Temp.: 1.8 °C @ 2019-02-03 00:05
Humidex: -5.0 °C @ 2019-02-03 00:51
Equiv. Chill Temp.: -7.4 °C @ 2019-02-03 00:30
Wind Speed: 20.3 km/hr @ 2019-02-03 00:30
Wind Direction: 232.0 ° @ 2019-02-03 00:30

[Wind Forecast \(4Shrs\). Internet Required.](#)

Fugitive Dust Management

Sprinkler System



- In 2016 we developed a sprinkler system for our coal field with input from community stakeholders
 - Sprinkler system consisted of 3 towers
- Since 2019, sprinkler system consists of 7 towers and is controlled via a computer system PLC
- Sprinkler System is typically used in conjunction with our Water Tankers for dust suppression



Fugitive Dust Management

In-Plant Roads



- Similar to stockpile management, dust control on plant roadways vary based on seasonal conditions
- Internal visual inspection of roadways and related areas are conducted daily
- Dust from unpaved and paved roads are managed on a daily, or as-required, basis
 - Dust management practices include road sweeping, water flushing (temperature-permitting), closing/restricting roadways, and limiting vehicle speed



In early 2020 Stelco purchased a Regenerative Sweeper Truck for year-round road dust control.

The vacuum action of this unit requires no water, allowing for use in freezing temperatures that traditional sweepers cannot operate in.

Agenda

Discussion Topics for Today's Meeting



1. Welcome
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 April 2021 Meeting
4. Cokemaking Update
 - Recap: Coke Battery Performance
5. Fugitive Dust Management
6. **Secondary Materials Permanent Storage Facility**
7. Site-wide Environmental Compliance Approval Applications
8. Community Feedback
9. Adjournment



Secondary Materials Permanent Storage Facility



Existing Facility Overview

- Former limestone quarry at the west end of the Lake Erie Works Facility
- Onsite storage of non-hazardous secondary materials from ironmaking and steelmaking that cannot be recycled or reused
- The existing total approved fill capacity of the storage facility is 1,300,000 m³.
- Capacity at the existing storage facility expected to be reached by the end of 2023.



Above: Storage facility incorporates a high density polyethylene (HDPE) geomembrane liner underlain by a clay liner.

Secondary Materials Permanent Storage Facility



Existing Facility – Environmental Monitoring and Reporting

- Monthly, quarterly and annual sampling and testing is conducted to monitor various parameters:
 - Groundwater - 8 sampling wells
 - Surface water - 4 sampling locations
 - Leachate - 3 locations inside the storage facility
- Individual wells, leachate collection and transfer systems are inspected annually.
- Annual reports, containing abovementioned as well as other applicable information, are prepared and provided to the Ministry of the Environment, Conservation and Parks.



Above: Storage facility incorporates a high density polyethylene (HDPE) geomembrane liner underlain by a clay liner.

Secondary Materials Permanent Storage Facility



Proposed Expansion Due to Capacity Limitations

- Once capacity of the existing storage facility is reached, Stelco has two options:
 1. To pursue expansion of the storage facility (*recommended*), or
 2. To arrange for shipment and offsite disposal of non-hazardous materials at external landfill locations
- Our request for the expansion of the storage facility includes completing an Environmental Assessment (EA) under the Ontario Environmental Assessment Act.
- We intend to seek approval for disposal of non-hazardous steel-making secondary materials that cannot be reused or recycled (this may include historic materials from our Hamilton Works location)
- Capacity requirements are to be determined but could be approximately 870,000 m³.



Above: Storage facility incorporates a high density polyethylene (HDPE) geomembrane liner underlain by a clay liner.

Secondary Materials Permanent Storage Facility

Environmental Assessment Process



- There are two main steps in an Environmental Assessment:
 1. the Terms of Reference (ToR); and
 2. the Environmental Assessment (EA) itself.
- The ToR was officially commenced June 30, 2021 via announcements in the newspaper, website and e-mails to interested stakeholders and individuals. We expect this process to be complete in early 2022.
- The EA study must consider potential impacts for all aspects of the environment and for this site could include:
 - Groundwater
 - Surface water
 - Air quality
 - Noise
 - Socio-economic (including visual)
 - Biology
 - Cultural heritage resources (including archaeology)
 - Land use
 - Traffic; and
 - Agriculture.
- Consultation is a key component the EA process. We will keep the CLC informed of progress as well as provide ongoing notification and consultation opportunities for the general public.

Agenda

Discussion Topics for Today's Meeting



1. Welcome
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 April 2021 Meeting
4. Cokemaking Update
 - Recap: Coke Battery Performance
5. Fugitive Dust Management
6. Secondary Materials Permanent Storage Facility
7. Site-wide Environmental Compliance Approval Applications
8. Community Feedback
9. Adjournment



Site-Wide Environmental Compliance Approval

Application in Process



- LEW is applying for a site-wide environmental compliance approval for air and noise with limited operational flexibility
 - Includes demonstration of compliance with relevant air quality requirements
 - Also includes proposed plan to reduce noise sound levels
 - Combination of mitigation at-source and along path of noise
- Also applying to amend existing site-wide environmental compliance approval for water
 - New cooling tower for by-product energy recovery generation facility
 - No proposed changes to water quality limits



Agenda

Discussion Topics for Today's Meeting



1. Welcome
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 April 2021 Meeting
4. Cokemaking Update
 - Recap: Coke Battery Performance
5. Fugitive Dust Management
6. Secondary Materials Permanent Storage Facility
7. Site-wide Environmental Compliance Approval Applications
8. **Community Feedback**
9. Adjournment

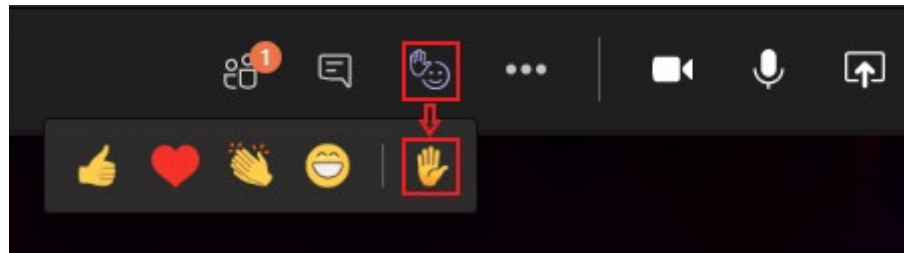


Community Feedback

Questions and Comments



- In order to facilitate questions from members of our Committee as well as from the general public, please indicate your desire to ask a question by using the 'raise hand' tool at the top of your MS Teams screen.



- Once you are recognized your microphone (and camera should you so choose) will be activated. Please click on the 'raise hand' feature a second time to lower your hand.
- We will cycle through the questions and comments in the order they are received.
- If you have multiple questions, we ask that you ask your first question and then return to the queue so that everyone has equal opportunity to make their comments.
- Alternatively, you can utilize the chat feature to type a question or comment.

Agenda

Discussion Topics for Today's Meeting



1. Welcome
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 April 2021 Meeting
4. Cokemaking Update
 - Recap: Coke Battery Performance
5. Fugitive Dust Management
6. Secondary Materials Permanent Storage Facility
7. Site-wide Environmental Compliance Approval Applications
8. Community Feedback
9. **Adjournment**





The Steel Company of Canada